

2006-08

LIST Submitted

**ADEQ Response 52:** ADEQ disagrees that its assessment methodology is inconsistent with state water quality standards or EPA's 2006 assessment and listing guidance. See ADEQ Responses #17, #18 and #19.

*Franciscan Friars of California*

**Franciscan Friars Comment 53:** We adopt and incorporate by reference the comments submitted by the Arizona Mining Association relating to the Methods and Technical Support component of the draft Integrated Report. We are specifically concerned with the addition of selenium as a cause of impairment to Pinto Creek (See page SR-46 in the Integrated Report). This determination appears to be based on 3 grab sample exceedances which, as explained in AMA comments, is an insufficient number of samples and an inappropriate methodology.

**ADEQ Response 53:** See Responses #18 and #19. ADEQ agrees, based on weight of evidence, that Pinto Creek (from unnamed tributary at 331927/1105456 to West Fork of Pinto Creek) requires additional analysis for selenium and has been removed from the impaired waters list (Category 5) and placed on the planning list for further monitoring. *check*

SURFACE WATERS ASSESSED AS IMPAIRED BY ADEQ (The 2006/2008 303(d) List submittal to EPA)		
Surface Water	Reach or Lake Number	Pollutants or Parameters of Concern
<b>Bill Williams Watershed</b>		
Alamo Lake	15030204-0040	Ammonia, pH (high), low dissolved oxygen
Bill Williams River From Alamo Lake to Castaneda Wash	15030204-003	Ammonia, pH (high), low dissolved oxygen
Santa Maria River From Little Sycamore Creek to Little Shipp Wash	15030203-013	Mercury
<b>Colorado - Grand Canyon Watershed</b>		
Colorado River From Lake Powell to Paria River	14070006-001	Selenium
Colorado River From Parashant Canyon to Diamond Creek	15010002-003	Selenium, suspended sediment concentration
Paria River From Utah border to Colorado River	14070007-123	<i>Escherichia coli</i> bacteria, suspended sediment concentration
Virgin River From Beaver Dam Wash to Big Bend Wash	15010010-003	Selenium, suspended sediment concentration
<b>Colorado - Lower Gila Watershed</b>		
Colorado River From Hoover Dam to Lake Mohave	15030101-015	Selenium
Colorado River From Main Canal to Mexico border	15030107-001	Selenium, low dissolved oxygen
Gila River From Coyote Wash to Fortuna Wash	15070201-003	Selenium, boron
Painted Rock Borrow Pit Lake	15070201-1010	Low dissolved oxygen
<b>Little Colorado - San Juan Watershed</b>		
Little Colorado River From Silver Creek to Carr Wash	15020002-004	<i>Escherichia coli</i> bacteria, suspended sediment concentration
Little Colorado River From Porter Tank Draw to McDonalds Wash	15020008-017	Copper, silver, suspended sediment concentration
<b>Middle Gila Watershed</b>		
Alvord Park Lake	15060106B-0050	Ammonia
Chaparral Lake	15060106B-0300	Dissolved oxygen, <i>Escherichia coli</i> bacteria
Cortez Park Lake	15060106B-0410	Dissolved oxygen, high pH
Gila River From San Pedro River to Mineral Creek	15050100-008	Suspended sediment concentration
Gila River From Centennial Wash to Gillespie Dam	15070101-008	Boron, selenium
Hassayampa River From headwaters to Copper Creek	15070103-007A	Low pH
Mineral Creek From Devils Canyon to Gila River	15050100-012B	Copper, low dissolved oxygen, selenium

SURFACE WATERS ASSESSED AS IMPAIRED BY ADEQ (The 2006/2008 303(d) List submittal to EPA)		
Surface Water	Reach or Lake Number	Pollutants or Parameters of Concern
Queen Creek From headwaters to mine WWTP discharge	15050100-014A	Copper
Queen Creek From mine WWTP to Potts Canyon	15050100-014B	Copper
Turkey Creek From unnamed tributary at 34°19'28"/112°21'28" to Poland Creek	15070102-036B	Copper, lead
<b>Salt River Watershed</b>		
Apache Lake	15060106A-0070	Low dissolved oxygen
Canyon Lake	15060106A-0250	Low dissolved oxygen
Christopher Creek From headwaters to Tonto Creek	15060105-353	Phosphorus
Five Point Mountain Tributary From headwaters to Pinto Creek	15060103-885	Copper
Pinto Creek From West Fork Pinto Creek to Roosevelt Lake	15060103-018C	Selenium
Salt River From Pinal Creek to Roosevelt Lake	15060106A-004	Suspended sediment concentration
Salt River From Stewart Mountain Dam to Verde River	15060106A-003	Low dissolved oxygen
Tonto Creek From headwaters to unnamed tributary	15060105-013A	Phosphorus, low dissolved oxygen
<b>San Pedro – Willcox Playa – Rio Yaqui Watershed</b>		
Brewery Gulch From headwaters to Mule Gulch	15080301-337	Copper
Mule Gulch From headwaters to above Lavender Pit	15080301-090A	Copper
Mule Gulch From above Lavender Pit to Bisbee WWTP	15080301-090B	Copper
Mule Gulch From Bisbee WWTP to Highway 80 Bridge	15080301-090C	Cadmium, copper, low pH, zinc
San Pedro River From Babocomari Creek to Dragoon Wash	15050202-003	<i>Escherichia coli</i> bacteria
San Pedro River From Dragoon Wash to Tres Alamos Wash	15050202-002	Nitrate
San Pedro River From Aravaipa Creek to Gila River	15050203-001	<i>Escherichia coli</i> bacteria, selenium
<b>Santa Cruz – Rio Magdalena – Rio Sonoyta Watershed</b>		
Nogales and East Nogales washes From Mexico border to Potrero Creek	15050301-011	Ammonia, chlorine, copper, <i>Escherichia coli</i> bacteria
Santa Cruz River From Mexico border to Nogales WWTP	15050301-010	<i>Escherichia coli</i> bacteria

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<b>Surface Water</b>	<b>Reach or Lake Number</b>	<b>Pollutants or Parameters of Concern</b>
Sonoita Creek From 750 feet below Patagonia WWTP discharge to Santa Cruz River	15050301-013C	Low dissolved oxygen, zinc
<b>Upper Gila Watershed</b>		
Blue River From Strayhorse Creek to San Francisco River	15040004-025B	<i>Escherichia coli</i> bacteria
Cave Creek From headwaters to South Fork of Cave Creek	15040006-852A	Selenium
Gila River From New Mexico border to Bitter Creek	15040002-004	<i>Escherichia coli</i> bacteria, suspended sediment concentration
Gila River From Skully Creek to San Francisco River	15040002-001	Selenium
Gila River From Bonita Creek to Yuma Wash	15040005-022	<i>Escherichia coli</i> bacteria
San Francisco River From Blue River to Limestone Gulch	15040004-003	<i>Escherichia coli</i> bacteria
<b>Verde Watershed</b>		
East Verde River From Ellison Creek to American Gulch	15060203-022B	Selenium
East Verde River From American Gulch to Verde River	15060203-022C	Arsenic, boron
Oak Creek From headwaters to West Fork Oak Creek	15060202-019	<i>Escherichia coli</i> bacteria
Oak Creek From West Fork Oak Creek to tributary at 34°57'09" / 111° 45'13"	15060202-018A	<i>Escherichia coli</i> bacteria
Oak Creek From tributary at 34°57'09" / 111° 45'13" to downstream boundary of Slide Rock State Park	15060202-018B	<i>Escherichia coli</i> bacteria
Oak Creek From Slide Rock State Park to Dry Creek	15060202-018C	<i>Escherichia coli</i> bacteria
Oak Creek From Dry Creek to Spring Creek	15060202-017	<i>Escherichia coli</i> bacteria
Spring Creek From Coffee Creek to Oak Creek	15060202-022	<i>Escherichia coli</i> bacteria

# **SURFACE WATERS ADDED TO ARIZONA'S LIST OF IMPAIRED WATERS BY EPA**

*These assessment units were assessed as impaired by EPA in 2002 or 2004.*

*They remain on Arizona's list of impaired waters until EPA determines that they are no longer impaired.*

Surface Water	Reach or Lake Number	Pollutants or Parameters of Concern
Gila River Rainbow Wash - Sand Tank	15070101-005	DDT metabolites, toxaphene and chlordane in fish tissue
Gila River Sand Tank - Painted Rocks Reservoir	15070101-001	DDT metabolites, toxaphene and chlordane in fish tissue
Hassayampa River Buckeye Canal - Gila River	15070103-001B	DDT metabolites, toxaphene and chlordane in fish tissue
Painted Rocks Reservoir	15070101-1020A	DDT metabolites, toxaphene and chlordane in fish tissue
Salt River 23 <sup>rd</sup> Ave WWTP - Gila River	15060106B-001D	DDT metabolites, toxaphene and chlordane in fish tissue
<b>Salt River Watershed</b>		
Crescent Lake	15060101-0420	High pH
Tonto Creek From headwaters to unnamed tributary	15060105-013A	<del>Low dissolved oxygen</del> ADEG added
<b>San Pedro - Willcox Playa - Rio Yaqui Watershed</b>		
Brewery Gulch From headwaters to Mule Gulch	15080301-337	<del>Copper</del> ADEG added
Mule Gulch From above Lavender Pit to Bisbee WWTP	15080301-090B	Low pH
<b>Santa Cruz - Rio Magdalena - Rio Sonoyta Watershed</b>		
Parker Canyon Lake	15050301-1040	Mercury in fish tissue yes
Rose Canyon Lake	15050302-1260	Low pH
<b>Upper Gila Watershed</b>		
Gila River From Bonita Creek to Yuma Wash	15040005-022	Sediment yes add
San Francisco River From headwaters to New Mexico border	15040004-023	Sediment wait new data what did ADEG say?
<b>Verde Watershed</b>		
Granite Creek From headwaters to Willow Creek	15060202-059A	Low dissolved oxygen
Watson Lake	15060202-1590	High pH, low dissolved oxygen, nitrogen
Whitehorse Lake	15060202-1630	Low dissolved oxygen

Inconclusive

<b>SURFACE WATERS ADDED TO ARIZONA'S LIST OF IMPAIRED WATERS BY EPA</b> <i>These assessment units were assessed as impaired by EPA in 2002 or 2004.</i> <i>They remain on Arizona's list of impaired waters until EPA determines that they are no longer impaired.</i>		
Surface Water	Reach or Lake Number	Pollutants or Parameters of Concern
<b>Bill Williams Watershed</b>		
Alamo Lake	15030204-0040	Mercury in fish tissue
Boulder Creek From unnamed wash at 34°41'14"/113°03'34" to Wilder Creek	15030202-006B	Mercury
Boulder Creek From Wilder Creek to Butte Creek	15030202-005A	Mercury
Burro Creek From Boulder Creek to Black Canyon Creek	15030202-004	Mercury
Coors Lake	15030202-5000	Mercury in fish tissue
<b>Colorado - Grand Canyon Watershed</b>		
<b>Colorado - Lower Gila Watershed</b>		
Painted Rock Borrow Pit Lake	15070201-1010	DDT metabolites, toxaphene and chlordane in fish tissue
<b>Little Colorado - San Juan Watershed</b>		
Bear Canyon Lake	15020008-0130	Low pH
Lake Mary (lower)	15020015-0890	Mercury in fish tissue
Lake Mary (upper)	15020015-0900	Mercury in fish tissue
<del>Little Colorado River From Silver Creek to Carr Wash</del>	15020002-004	<del>Sediment</del>
Long Lake (lower)	15020008-0820	Mercury in fish tissue
Lyman Lake	15020001-0850	Mercury in fish tissue
Soldier's Annex Lake	15020008-1430	Mercury in fish tissue
Soldier's Lake	15020008-1440	Mercury in fish tissue
<b>Middle Gila Watershed</b>		
Gila River Salt River - Agua Fria River	15070101-015	DDT metabolites, toxaphene and chlordane in fish tissue
Gila River Agua Fria River - Waterman Wash	15070101-014	DDT metabolites, toxaphene and chlordane in fish tissue
Gila River Waterman Wash - Hassayampa River	15070101-010	DDT metabolites, toxaphene and chlordane in fish tissue
Gila River Hassayampa River - Centennial Wash	15070101-009	DDT metabolites, toxaphene and chlordane in fish tissue
Gila River Centennial Wash - Gillespie Dam	15070101-008	DDT metabolites, toxaphene and chlordane in fish tissue
Gila River Gillespie Dam - Rainbow Wash	15070101-007	DDT metabolites, toxaphene and chlordane in fish tissue